

**BY ORDER OF THE CHIEF,  
NATIONAL GUARD BUREAU**

**MANPOWER STANDARD 4400RH**

**1 MARCH 2005**



***Manpower Standard***

***RAPID ENGINEERING DEPLOYMENT HEAVY OPERATING  
REPAIR SQUADRON ENGINEERING (RED HORSE)  
SQUADRON (RHS) OPERATIONS***

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This Air National Guard Manpower Standard (ANGMS) quantifies the manpower required to accomplish varying levels of workload in the Rapid Engineering Deployment Heavy Operating Repair Squadron Engineering (RED HORSE) Squadron (RHS) Operations function whose mission is to provide an integrated, year-round, realistic training environment (airspace, facilities, equipment) for units to enhance their combat capability and readiness. This standard is applicable to peacetime operations only. The Air National Guard (ANG) is the authority for the approval and publication of ANG Manpower Standards. Air Force (AF) and ANG directives contain policy and procedural guidance for the operation of the RHS Operations function. This standard was developed in accordance with AF Instruction (AFI) 38-201, *Determining Manpower Requirements*, and AF Manual (AFMAN) 38-208, Volume 1, *Air Force Management Engineering Program (MEP) - Processes*, and AFMAN 38-208, Volume 2, *Air Force Management Engineering Program (MEP) - Quantification Tools*. Send comments and suggested improvements on AF IMT 847, *Recommendation for Change of Publication*, through channels, to ANG, Management Engineering Branch (ANG/XPME/Operating Location TN [OLTN]), 3000 Handly Avenue, McGhee Tyson ANG Base TN 37777-6283.

**1. STANDARD DATA.**

1.1. Approval Date: 1 March 2005.

1.2. Man-hour Data Source. The Functional Estimating Equation technique was used to collect/determine man-hour/manpower data.

1.3. Man-hour Equation:  $Y = 433.01 + 3.723(X)$ .

#### 1.4. Workload Factor (WLF).

1.4.1. Title: An Authorization Required To Support A Unit Type Code (UTC).

1.4.2. Definition: The average monthly number of military authorizations required to support UTCs tasked by ANG/CE.

1.4.3. Source: Unit Manpower Document (UMD) (34 Command File Part B) maintained by ANG Full Time Requirements (ANG/XPMR). Count only authorizations with a valid UTC in the UTC data element. Confirm the UTCs on the UMD against UTCs listed in the Designed Operational Capabilities (DOC) tasking for ANG RED HORSE.

#### 1.5. Points of Contact.

1.5.1. Functional: Col Janice Stritzinger, ANG/CE

1.5.2. Manpower: Mr. Rick Gift, ANG/XPME/OLTN

### 2. APPLICATION INSTRUCTIONS.

2.1. Step 1. Man-hour Equation. Apply the man-hour equation in Paragraph 1.3., to determine required man-hours.

2.2. Step 2. Man-hour Availability Factor (MAF). Divide the resulting man-hours by the appropriate MAF times the overload factor. Fractional manpower requirements resulting from the application of this standard will be aggregated with the fractional requirements from FACs 1400RH, 41A0RH, and 4400RH. Aggregation will be done according to procedures in AFI 38-201.

2.3. Step 3. Upper and Lower Extrapolation Limits.

2.3.1.  $Y_U = 1490.68$

2.3.2.  $Y_L = 662.64$

2.4. Step 4. Air Force Specialty Codes (AFSC) Requirement. Use the Manpower Table at Attachment 3 to determine required AFSCs.

**3. STATEMENT OF CONDITIONS.** The normal hours of operation for this function are 80 hours per two-week period. Units work numerous schedules, from the normal 40 hours per week to alternate work schedules ranging from four ten-hour days per week to eight nine-hour days and one eight-hour day per two-week period. There are no other standard of living constraints that impact the daily operation of this work center.

DANIEL JAMES III, Lieutenant General, USAF  
Director, Air National Guard

## Attachment 1

## GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

*References*

AFI 38-201, *Determining Manpower Requirements*

AFMAN 38-208, Volume 1, *Air Force Management Engineering Program (MEP)-Processes*

AFMAN 38-208, Volume 2, *Air Force Management Engineering Program (MEP) - Quantification Tools*

*Abbreviations and Acronyms*

**AF** - Air Force

**AFI** - Air Force Instruction

**AFMAN** - Air Force Manual

**AFSC** - Air Force Specialty Codes

**ANG** - Air National Guard

**ANGMS** - Air National Guard Manpower Standard

**CE** - Civil Engineering

**DOC** - Designed Operational Capability

**FAC** - Functional Account Code

**IAW** - In Accordance With

**MAF** - Man-hour Availability Factor

**MEP** - Management Engineering Program

**RED HORSE** - Rapid Engineering Deployment Heavy Operating Repair Squadron Engineering

**RHS** - RED HORSE Squadron

**UMD** - Unit Manpower Document

**UTC** - Unit Type Code

**WLF** - Workload Factor

*Terms*

**Air National Guard Manpower Standard (ANGMS).** A numbered, specialized publication that quantifies manpower requirements for a work center. Also includes approved variances. See AFI 38-201.

**Man-hour.** A unit of measuring work. It is equivalent to one person working at a normal pace for 60 minutes, two people working at a normal pace for 30 minutes, or a similar combination of people working at a normal pace for a period of time equal to 60 minutes.

**Manpower Standard.** The basic tool used to determine the minimum level of manpower required to support a function. It is a quantitative expression that represents a work center's man-hour requirements in response to varying levels of workload.

## Attachment 2

## MANPOWER TABLE

Table A2.1. Standard Manpower Table.

STANDARD MANPOWER TABLE						
WORKCENTER/FAC	APLICABILTY MANHOUR RANGE					
<b>RHS Operations/FAC 4400RH</b>	<b>662.64 – 1490.68</b>					
Air Force Specialty Title	AFSC	Manpower Requirement				
Civil Engineer	032E3C	1	1	1	1	1
Civil Engineer	3E0X0	1	1	1	1	1
Electrical Power Production	3E0X2	1	1	1	1	1
Pavement Construction	3E2X1	1	1	1	1	1
Structural	3E3X1	1	1	1	1	1
Utilities	3E4X1		1	1	1	1
Operational Management	3E6X1			1	2	3
Total		5	6	7	8	9